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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,851	03/30/2004	Hyun Sook Kim	1594.1361	2334

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
HECKERT, JASON MARK	
ART UNIT	PAPER NUMBER
1746	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/811,851	KIM ET AL.	
	Examiner	Art Unit	
	Jason Heckert	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) *9-13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,14 and 15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :11/21/2006, 4/19/2004, 3/30/2004.

DETAILED ACTION

Election/Restrictions

1. Claims 9-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/21/07.

Claim Rejections - 35 USC § 102

1. Claims 1-3, 14-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Frucco. Frucco discloses a washing machine with a drum 14 rotatably mounted in tub 4 along with a circulation pump 12 connected to a recirculation conduit 9 for pumping water contained in a lower part of the machine 6 back into the drum 14 (col. 2 lines 18-25). Frucco discloses that the water is sprayed (col. 2 line 23), and therefore a nozzle or equivalent fluid delivery device is inherent. Although Frucco does not disclose a motor for rotating the drum, the use of a motor to rotate said drum is inherent and Frucco does state that a control mechanism 17 automatically energizes or deenergizes the various electronic components in the washing machine such as the pump and presumably the motor, which is present in virtually every commercially available washing machine. Said control mechanism 17 is also used for controlling the amount of water to deliver to the tub as well as determining the amount of laundry (col. 4 line 28-30). In regards to claims 14 and 15, Frucco further discloses that the control mechanism measures the time duration of pumping operations to reach a predetermined level (col. 3 lines 15-18)

as well as the fact that the characteristics of different fabrics are stored in memory, so that the control mechanism can automatically execute the laundering program in accordance with the fabric type selected (col. 4 lines 33-44). Frucco also discloses supplemental pumping operations (col. 4 lines 8-10) that are related to fluid amount and, as stated previously, the control mechanism can use said information to determine laundry load.

Claim Rejections - 35 USC § 103

2. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Frucco in view of Uhlin. Frucco discloses a washing machine capable of determining proper fluid amount for washing. Although amount of wash fluid is directly proportional to water level, Frucco does not disclose a water level sensing apparatus. Numerous references disclose the use of water level sensors in washing machines to ensure minimum levels are met or to prevent overfilling and their mere implementation cannot be considered novel. Uhlin discloses a standard drum-type washing machine, similar to that of Frucco and the applicant's claimed invention, with level sensing means 15, 16, and 17. This type of sensor is capable of determining water level when the fluid level is stabilized, such as when the motor and pump are stopped. It would have been obvious at the time of the invention to modify Frucco and include a water level sensor, as taught by Uhlin, in order to monitor the water level in the washing machine so as to ensure a minimum level is met and prevent overfilling.

3. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frucco. Frucco discloses that the control mechanism can control the various aspects of

the laundering operation in response to the *selected* laundering programs in accordance with the characteristics, such as fabric type, and amount of laundry to be laundered (col. 4 lines 33-44). Duration and operation of pump recirculation is considered to be a standard wash parameter and it is disclosed that the control mechanism controls pump operation as well as the operation of the other electric devices in the machine related to any *selected* laundering program (col. 2 lines 43-49). Frucco does not disclose a key input unit provided with wash course buttons or fabric type buttons but, as stated previously, implies that the user can *select* various laundering programs in accordance with these features. Furthermore, keypads, knobs, and other input devices are notoriously well known in the art for inputting such information to washing machine control mechanisms and their mere inclusion cannot be considered novel. It would have been obvious at the time of the invention to modify Frucco and include a key-input device so that the use may input the characteristics of the wash load into the control mechanism.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Heckert whose telephone number is (571) 272-2702. The examiner can normally be reached on Mon. to Friday, 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH

MICHAEL BARR
SUPERVISORY PATENT EXAMINER